

CLAIMS

What is claimed is:

5 1. A method for proactively maintaining a telephone system local loop, the method comprising:

Sub a1 communicating with a communications network and acquiring status information associated with a Digital Loop Carrier; and

Sub a1 predicting proactive maintenance based upon the status information.

10

Sub B2 2. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising predicting proactive maintenance of the local loop based upon the status information.

15

3. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising weighting the status information.

20

4. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising combining the status information with information from a Dynamic Network Analyzer.

25

5. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising combining the status information with information from a Loop Facilities and Control System.

6. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising generating work order information describing the predicted proactive maintenance.

7. A method for proactively maintaining a telephone system local loop according to claim 6, further comprising dispatching the work order information.
8. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a technician dispatch system to dispatch work order information describing the predicted proactive maintenance.
9. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising updating the Digital Loop Carrier with completed service order information
10. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a TELCORDIA Tech Access System to dispatch work order information describing the predicted proactive maintenance.
11. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising interfacing with a Loop Maintenance Operating System to dispatch work order information describing the predicted proactive maintenance.
12. A method for proactively maintaining a telephone system local loop according to claim 1, further comprising acquiring work order information from a Loop Maintenance Operating System.
13. A method for proactively maintaining a telephone system local loop, the method comprising:
- communicating with a communications network and acquiring at least one of customer information associated with copper line pairs, service information associated with copper line pairs, and status information associated with a Digital Loop Carrier;
- storing the acquired information;
- combining the stored information; and

sub a2
cont
predicting proactive maintenance based upon the combined information,

Sub B 5
14. A method for proactively maintaining a telephone system local loop according to claim 13, wherein the step of combining the stored information further includes weighting the stored information.

15. A method for proactively maintaining a telephone system local loop according to claim 13, further comprising generating work order information describing the predicted proactive maintenance.

10
16. A method for proactively maintaining a telephone system local loop according to claim 13, further comprising dispatching work order information describing the predicted proactive maintenance.

15
17. A system for predicting proactive maintenance of a telephone system local loop, the system comprising:

a Dynamic Network Analyzer module communicating with a communications network and acquiring Dynamic Network Analyzer information;

20
a Loop Facilities and Control System module communicating with the communications network and acquiring Loop Facilities and Control System information;

a Digital Loop Carrier module communicating with the communications network and acquiring Digital Loop Carrier information;

a database stored in memory, the database storing the acquired information; and

25
a processor capable of processing information stored in the database and of generating proactive maintenance.

sub a3
18. A computer program product for proactively maintaining a telephone system, comprising:

30
a computer-readable medium; and

a Digital Loop Carrier module stored on the medium, the Digital Loop Carrier Module coupled to a Digital Loop Carrier over a communications network, the Digital Loop Carrier module acquiring information concerning the Digital Loop Carrier.

19. A computer program product according to claim 18, further comprising a Dynamic Network Analyzer module stored on the medium, the Dynamic Network Analyzer module coupled to a Dynamic Network Analyzer over a communications network, the Dynamic Network Analyzer module acquiring information concerning the Dynamic Network Analyzer.

- 10 20. A computer program product according to claim 18, further comprising a Loop Facilities and Control System module stored on the medium, the Loop Facilities and Control System module coupled to a Loop Facilities and Control System over a communications network, the Loop Facilities and Control System module acquiring information concerning the Loop Facilities and Control System.

0769-1300